

**DETAILED ACTION**

1. Appeal Brief filed 03/19/2010 has been received and fully considered.
2. Claims 9 and 31-40 are pending.
  
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas R. Lane (Reg. No. 42,781) on 05/25/2010.

The application has been amended as follows:

Claim 9 (currently amended) A method comprising:

running guest software in a processor mode that enables the guest software to operate at a privilege level intended by the guest software;

identifying, within said processor mode, an attempt of the guest software to perform an operation restricted by said processor mode;

determining, within said processor mode, whether the attempt of the guest software would fail if the guest software was running outside said processor mode;

allowing the guest software to attempt the operation within said processor mode in response to determining that the attempt would fail if the guest software was running outside said processor mode; and

transferring control over the operation to an operating system running within said processor mode in response to the guest software attempting the operation; and

generating a virtualization trap in response to determining that the attempt would succeed if the guest software was running outside said processor mode.

Claim 33 (currently amended) A processor comprising:

a storage location to store an indicator to indicate whether the processor is configured to execute guest software in a mode that enables the guest software to operate at a privilege level intended by the guest software; and

logic to execute the guest software in said processor mode, to identify, within said processor mode, an attempt of the guest software to perform an operation restricted by said processor mode, to determine, within said processor mode, whether

the attempt would fail if the guest software was running outside said processor mode, to allow the guest software to attempt the operation within said processor mode in response to determining that the attempt would fail if the guest software was running outside said processor mode, and to transfer control over the operation to an operating system running within said processor mode in response to the attempt; and to generate a virtualization trap in response to determining that the attempt would succeed if the guest software was running outside said processor mode.

Claim 36 (currently amended) A system comprising:  
a memory to store application software and an operating system; and  
a processor to execute the application software in a processor mode that enables the application software to operate at a privilege level intended by the application software, to identify, within said processor mode, an attempt of the application software to perform an operation restricted by said processor mode, to determine, within said processor mode, whether the attempt would fail if the application software was running outside said processor mode, to allow the application software to attempt the operation within said processor mode in response to determining that the attempt would fail if the guest application software was running outside said processor mode, and to transfer control over the operation to the operating system running within said processor mode in response to the attempt; and to generate a virtualization trap in response to determining that the attempt would succeed if the application software was running outside said processor mode.

Claim 39 (currently amended) A non-transitory computer readable storage medium that provides instructions, which when executed on a processor, cause the processor to:

present a virtual machine to guest software in a processor mode that enables the guest software to operate at a privilege level intended by the guest software; and

handle a virtualization trap, where the virtualization trap is generated in response to an attempt of the guest software to perform an operation restricted by said processor mode and a determination, within said processor mode, that the attempt would succeed if the guest software was running outside the virtual machine; and

allow the guest software to attempt the operation within said processor mode in response to determining that the attempt would fail if the guest software was running outside said processor mode, and

transfer control over the operation to an operating system running within said processor mode in response to the attempt.

Claim 40 (currently amended) The non-transitory computer readable storage medium of claim 39 wherein the determination that the attempt would succeed includes determining whether the application software is running with sufficient privilege to perform the operation.

***Allowable Subject Matter***

4. Claims 9 and 31-40 are allowed.
5. The following is an examiner's statement of reasons for allowance: The prior art teaches the concepts of running guest software in a mode that enables the software to operate at an intended privilege level and determining when the software attempts an operation that would not succeed. However, the prior art does not explicitly disclose allowing the guest software to attempt the operation within the mode in response to determining that the attempt would fail if the guest software was running outside the mode; and transferring control over the operation to an operating system running within the mode in response to the guest software attempting the operation; and generating a virtualization trap in response to determining that the attempt would succeed if the guest software was running outside the mode when in combination with the remaining claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PYZOCZA whose telephone number is

(571)272-3875. The examiner can normally be reached on Monday-Thursday, 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Pyzocha/  
Primary Examiner, Art Unit 2437